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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,694	08/20/2003	Robin J. Green	SONYP025	9282

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EXAMINER

REPKO, JASON MICHAEL

ART UNIT	PAPER NUMBER
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2628

DATE MAILED: 04/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/645,694

Applicant(s)

GREEN, ROBIN J.

Examiner

Jason M. Repko

Art Unit

2628

–The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

THE REPLY FILED 07 April 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 1-40.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____.
13. ☐ Other: _____.


ULKA CHAUHAN
SUPERVISORY PATENT EXAMINER

Continuation of 3. NOTE: The proposed amendments change the scope of the claims, which raises new issues that would require further consideration.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 4/7/2006 have been fully considered but they are not persuasive.
2. The introduced amendments raise new issues that would further consideration. Specifically, the amended claim further narrows the scope by excluding a one to one correspondence between texels and pixels. The amendments will not be entered.
3. With regard to the argument "Neagle cannot teach sampling a pixel at a center point because this is meaningless when referring to pixels," this assertion is incorrect in the context of super-sampling as disclosed in the Neagle et al reference. The Applicant's assertion "there is no center to a single pixel" contradicts the Neagle et al reference (*paragraph 129: "Each pixel has exactly one data point calculated for it, and the single data point is located at the center of the pixel."*; *paragraph 131: "Filter 72 may simply average samples 74A-B to form the final value of output pixel 70, or it may increase the contribution of sample 74B (at the center of pixel 70) and diminish the contribution of sample 74A (i.e., the sample farther away from the center of pixel 70)."*). Applicant's attention is directed to FIG. 4, FIG. 5A, and FIG. 5B of the Neagle et al reference and the accompanying detailed description. In the description of the use of multiple-samples in paragraph 131, Neagle et al explicitly states sample 74B is "at the center of pixel 70." Furthermore, Neagle et al defines a sample position (*paragraph 113: "Stated another way, the sample buffer stores a plurality of samples that have positions that correspond to locations in screen space on the display, i.e., the samples contribute to one or more output pixels on the display."*), and sample position information relative to a pixel center coordinate (*paragraph 119:*

"The sample position information may also comprise offset values, wherein the offset values are relative to pre-defined locations in the sample buffer, such as...pixel center coordinates."). In the embodiment disclosed in paragraph 256, Neagle et al restricts one of the sample locations to the center location: "In one embodiment, the graphics system ensures that one of the rendered samples lies in the center of the bin or pixel area." Therefore, the Neagle et al reference teaches "sampling at the center of a pixel," which was relied upon in the rejections in the Office Action dated 2/7/2006. The sampling method disclosed by Neagle et al can be applied to sampling the texture used by Sloan et al in paragraph 5 of section 6.2 ("Sampling SH Radiance on Graphics Hardware"): "To reduce aliasing...The basis function textures are also super-sampled and decimated in the same way as a preprocess." In paragraph 15, Neagle et al states the advantages of performing super-sampling that are well known in the art:

To obtain more realistic images, some prior art graphics systems have gone further by generating more than one sample per pixel...By calculating more samples than pixels (i.e., super-sampling), a more detailed image is calculated than can be displayed on the display device. For example, a graphics system may calculate four samples for each pixel to be output to the display device. After the samples are calculated, they are then combined or filtered to form the pixels that are stored in the frame buffer and then conveyed to the display device.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Repko whose telephone number is 571-272-8624. The examiner can normally be reached on Monday through Friday 8:30 am -5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on 571-272-7782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMR


ULKA CHAUHAN
SUPERVISORY PATENT EXAMINER